

**REMARKS**

This response amends Claims 1-6, 9-13, 19, and 21-25, and cancels Claims 7, 8, 14-18, 20, 28, and 29 without prejudice to Applicant's pursuit of the subject matter recited in these claims in a divisional or continuation application. Now in the application are Claims 1-6, 9-13, 19, and 21-27, of which Claims 1 and 19 are independent. No new matter is presented and no new issues are raised. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

**Claim Rejections under 35 U.S.C. § 101**

Claims 1-13, 14, and 19-27 stand rejected under 35 U.S.C. § 101 for reciting non-statutory subject matter. Applicant respectfully traverses this rejection on the basis of the following arguments and further contend that each pending claim recite statutory subject matter directed to new and useful processes for managing a network in accordance with 35 U.S.C. § 101. For the ease of the discussion below, each respective claim set is discussed separately.

**IA. Rejection of Claims 1-13 under 35 U.S.C. § 101:**

The Office Action rejects Claims 1-13 as being directed to non-statutory subject matter. Applicant's respectfully traverse this rejection on the basis of the following arguments, and further contend that these claims, as described below, are directed to statutory subject matter.

Claims 2-6 and 9-13 depend, directly or indirectly, on Claim 1, and thereby incorporate the patentable features of Claim 1. Claims 7 and 8 are cancelled and therefore the rejection of Claims 7 and 8 under 35 U.S.C. § 101 is considered moot.

Amended Claim 1 is directed to a method of monitoring a business process of an entity associated with a service level management domain. The service level management domain includes a plurality of management layers. The method includes, amongst other steps, a step of identifying a plurality of services a network provides for the entity in performance of the business process. The services being composed of a number of network components and the business process being composed of a number of the services. The method further recites steps of determining at least one value of a variable that indicates an operational characteristic of at least one of the services and monitoring the at least one value of the variable to monitor the business process.

The subject matter recited in amended Claim 1 is a “useful” process which produces a useful, tangible, and concrete result. The subject matter recited in amended Claim 1 provides a practical application to network management and is not merely an abstract idea. Amended Claims 1-6 and 9-13 recite limitations to a practical application in the technical arts. That is, the method recited in amended Claim 1 provides a practical application of monitoring a business process of an entity associated with a service level management domain. The service level management domain, as disclosed in the instant specification, provides a layered approach to managing a network by associating network components, services, and business processes. Hence, the claim method is not merely an abstract idea and produces a useful, tangible, and concrete result. That result being a measurement or determination of whether a service associated with a business process complies with a service requirement, for example, a service level agreement, as described throughout the instant specification.

Moreover Applicant respectfully asserts the Examiner has failed to meet his burden of establishing a basis under 35 U.S.C. §101 to reject claims 1-13. That is, the Examiner has failed to expressly state how the language of the claims has been interpreted to support the rejection. In the Office Action the Examiner merely makes conclusory statements are directed to an abstract idea. As such, if the Examiner is not persuaded to withdraw the rejections under 35 U.S.C. §101, Applicant respectfully requests the Examiner to meet his burden of expressly stating how the language of the claims has been interpreted in order to support the rejection.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of amended Claims 1-6 and 9-13 under 35 U.S.C. § 101.

IB. Rejection of Claim 14 under 35 U.S.C. § 101:

Claim 14 stands rejected under 35 U.S.C. § 101. Applicant respectfully traverses this rejection in view of the cancellation of Claim 14. Accordingly, Applicant considers the rejection of Claim 14 moot and respectfully requests the Examiner to withdraw the rejection of Claim 14 under 35 U.S.C. § 101.

IC. Rejection of Claims 19-27 under 35 U.S.C. § 101:

The Office Action rejects Claims 19-27 under 35 U.S.C. § 101 as reciting an abstract idea that does not produce a useful, tangible, concrete result. Applicant respectfully traverses this rejection on the basis of the following arguments, and further contends that the subject matter

recited in these claims, as described below, recites a “useful” process that produces a tangible and concrete result.

Claim 20 is cancelled by the above amendment and therefore the rejection of Claim 20 is considered moot under 35 U.S.C. § 101. Claims 21-27 depend, directly or indirectly upon amended Claim 19 and thereby incorporate the patentable features of amended Claim 19.

Amended Claim 19 is directed to a method of providing service level management. The method includes a step of determining services required by a business process. The business process being composed of the services and the services being composed of a plurality of network components. The method further includes a step of determining service parameters marked by service levels for each service. Each of the service parameters is a variable whose value is an index representative of an operational characteristic of an associated service provided by a network formed by the plurality of network components.

Amended Claims 19 and 21-27 provide a method for providing service level management. That is, the object of the invention is to provide a method by which to manage data, voice, and video networks in terms of services. A second object of the invention provides a methodology by which a business can determine the relationship between low level networking technology and high level goals of the business. Service level management provides an additional layer above the enterprise management layer, which is above other management layers such as, device management, network management, traffic management, system management, and/or application management. Service level management as defined on page 23 of the application is the identification and monitoring of service level parameters. That is, amended Claim 19 recites data gathering and post manipulation activity in determining services required by a business process and determining service parameters marked by service levels for each service. Hence, amended Claims 19 and 21-27 recite patentable subject matter under 35 U.S.C. § 101.

Moreover Applicant respectfully asserts the Examiner has failed to meet his burden of establishing a basis under 35 U.S.C. §101 to reject claims 1-13. That is, the Examiner has failed to expressly state how the language of the claims has been interpreted to support the rejection. In the Office Action the Examiner merely makes conclusory statements are directed to an abstract idea. As such, if the Examiner is not persuaded to withdraw the rejections under 35 U.S.C. §101,

Applicant respectfully requests the Examiner to meet his burden of expressly stating how the language of the claims has been interpreted in order to support the rejection.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claims 19-27 under 35 U.S.C. §101.

**Claim Rejections under 35 U.S.C. § 102 & 35 U.S.C. § 103**

Claim 1-13, 14, and 19-27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over the publication entitled “Spectrum Service Level Management Definition, Offerings, and Strategy” authored by the Applicant, Dr. Lundy Lewis (hereinafter “Lewis”). Applicant respectfully traverses each of these rejections on the basis of the following arguments and above amendments, and further contend that Lewis fails to disclose, teach, or suggest all elements of these claims, as described below, and hence, does not detract from the patentability of the claimed invention. For the ease of the discussion below, each respective claim set is discussed separately.

**IIA. Rejection of Claims 1-13 under 35 U.S.C. § 102(b) & 35 U.S.C. § 103(a):**

The Office Action rejects Claims 1-13 as being anticipated by or, in the alternative, obviated by Lewis. Applicant respectfully traverses this rejection on the basis of the above amendments and the following arguments, and further contends that Lewis fails to disclose, teach, or suggest all elements of these claims, as described below, and hence, does not detract from the patentability of the claimed invention.

Claims 2-6 and 9-13 depend, directly or indirectly on amended Claim 1, and thereby incorporate the patentable features of amended Claim 1. Claims 7 and 8 have been cancelled in the above amendment and therefore the rejection of these claims is considered moot.

The Lewis reference describes an early conceptual architecture of Service Level Management that defines a business process as depending on physical components. That is, the Lewis reference defines a service as any component, application, or medium upon which the business process depends. Figure 1 of the Lewis reference illustrates a simple business process with supporting services. Figure 1 is described on page 1 of the Lewis reference and the description supports the definition of a service provided therein. That is, service level

management defined by the Lewis reference provides a direct correlation between physical components and the business process and fails to take into account any functions or operations that arise from the physical structure of the network in defining business processes. Hence, the Lewis reference does not disclose, teach or suggest the subject matter recited in amended Claims 1-6 and 9-13.

Amended Claim 1 is directed to a method of monitoring a business process of an entity associated with a service level management domain. The service level management domain includes a plurality of management layers. The claimed method includes a step of identifying a plurality of services a network provides for the entity in performance of the business process. The service being composed of a plurality of network components and the business process being composed of the plurality of services. The method further recites steps of determining at least one value of a variable that indicates an operational characteristic of at least one of the plurality of services and monitoring the at least one value of the variable to monitor the business process. That is, the business process recited in amended Claim 1 is composed of services which, in turn, is composed of components. *See*, page 19, lines 29-30 of the specification; page 23, lines 11-30 of the specification; and Figure 1. That is, a business process as recited in amended Claim 1 is composed of services and those services are composed of components. The business process and the components fall outside a service level management domain while the services are within the service level domain.

In contrast to the Lewis reference, the services recited in amended Claim 1 are defined as a function that a network provides for the business. *See*, page 20, line 11 of the specification. The Lundy reference defines a service as any component, application, or medium upon which the business process depends. As such, the Lewis reference relies upon the physical components to manage a business process and fails to account for services whose performance depends upon performance of network components that support the service. One example of a service in accordance with the present invention is providing Internet access. The state of the service may be defined by one or more service parameter values. The service may have a predefined state expressed as a range of parameter values. The state of the service may depend, for example, on a collection of service parameter values for availability, reliability, security, integrity and response time. Hence, a service as defined by the present invention relates to a physical component, but is a functional state of the service provided by the network.

The Lewis reference does not disclose, teach, or suggest that a business process is composed of services, which, in turn, the services are composed of physical components. The Lewis reference teaches the business process depends on physical components. Hence, the Lewis reference discloses, teaches, and suggests a structure, an operation, and a function different from the structure, operation and function recited in amended Claim 1. Accordingly, the Lewis reference does not anticipate amended Claim 1, and does not obviate amended Claim 1. Hence, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claims 1-6 and 9-13 under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a).

IIB. Rejection of Claim 14 under 35 U.S.C. § 102(b) & 35 U.S.C. § 103(a):

The Office Action rejects Claim 14 as being anticipated by Lewis and in the alternative obviated by Lewis. Claim 14 is cancelled by the above amendment and therefore, Applicant considers the rejection of Claim 14 moot. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claim 14 under 35 U.S.C. § 102(b) and under 35 U.S.C. § 103(a).

IIC. Rejection of Claims 19-27 under 35 U.S.C. § 102(b) & 35 U.S.C. § 103(a):

The Office Action rejects Claims 19-27 as being anticipated by or, in the alternative, obviated by Lewis. Applicant respectfully traverses this rejection on the basis of the above amendments and the following arguments, and further contends that Lewis fails to disclose, teach, or suggest all elements of these claims, as described below, and hence, does not detract from the patentability of the claimed invention.

Claims 21-26 depend, directly or indirectly on amended Claim 19, and thereby incorporate the patentable features of amended Claim 19. Claim 20 have been cancelled in the above amendment and therefore the rejection of these claims is considered moot.

Amended Claim 19 is directed to a method of providing service level management. The method includes a step of determining services required by a business process. The business process being composed of the services and the services being composed of a plurality of network components. The method further recites a step of determining service parameters marked by service levels for each service. Each of the service parameters is a variable whose value is an index representative of an operational characteristic of an associated service provided by a network formed from the plurality of network components. Nowhere does the Lewis

reference disclose, teach or suggest a business process being composed of services, and the services being composed of a number of network components as recited in amended Claim 19.

The Lewis reference describes an early conceptual architecture of Service Level Management that defines a business process as depending on physical components. That is, the Lewis reference defines a service as any component, application, or medium upon which the business process depends. Figure 1 of the Lewis reference illustrates a simple business process with supporting services. Figure 1 is described on page 1 of the Lewis reference and the description supports the definition of a service provided therein. That is, service level management defined by the Lewis reference provides a direct correlation between physical components and the business process and fails to take into account any functions or operations that arise from the physical structure of the network in defining business processes. Hence, the Lewis reference does not disclose, teach or suggest the subject matter recited in amended Claims 19 and 21-27.


The Lewis reference does not disclose, teach, or suggest that a business process is composed of services, which, in turn, the services are composed of physical components. The Lewis reference teaches the business process depends on physical components. Hence, the Lewis reference discloses, teaches, and suggests a structure, an operation, and a function different from the structure, operation and function recited in amended Claim 19. Accordingly, the Lewis reference does not anticipate amended Claim 19, and does not obviate amended Claim 19. Hence, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claims 19 and 20-27 under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a).

**CONCLUSION**

In view of the remarks set forth above, Applicants contend that Claims 1-6, 9-13, 19, and 21-25 presently pending in this application, are patentable, and in condition for allowance. If the Examiner deems there are any remaining issues, we invite the Examiner to call the undersigned at (617) 227-7400.

Respectfully submitted,

LAHIVE & COCKFIELD, LLP

A handwritten signature in dark ink, appearing to read "David R. Burns", written over a horizontal line.

David R. Burns  
Attorney for Applicant  
Reg. No. 46,590

28 State Street  
Boston, MA 02109  
Tel. (617) 227-7400  
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